

## MORE ABOUT TUDORS . . . .

length (this does not apply to the experimental Mk. VII which, with Hercules engines and their centrally disposed airscrew shafts, requires the original length of leg to give ground clearance); and the improved wing-root fillets.

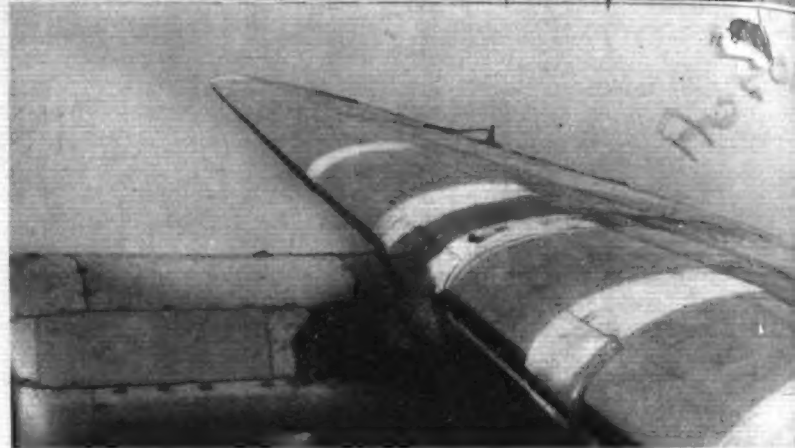
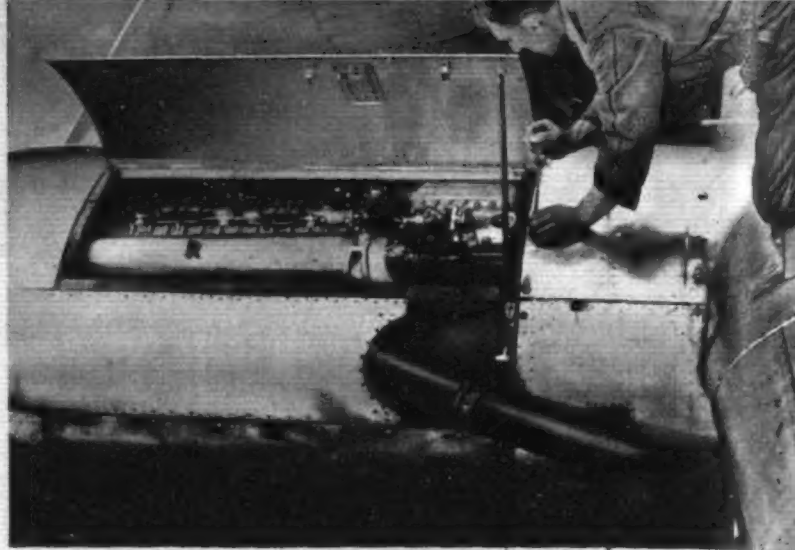
Most recent of the modifications in this class, which are still being incorporated on some of the Tudors at Woodford, are a smaller and neater root fillet on the wing trailing edge, and a new small fairing on the wing-root leading edge. In addition, the leading edges of the mainplanes are being replaced with nose strips carrying flush-fitting de-icing elements. It is difficult, visually, to detect much difference between new and old; however, fewer rivet heads and an exceptionally smooth finish over and between the de-icing elements will be seen in future. Improved manufacturing processes have been introduced for the panels which fair engine nacelles into wing leading edges. These are now neater and much better fitting. One effect of these aerodynamic alterations has been to delay the onset of the stall by as much as 30 knots.

A large number of minor modifications are concerned with safety precautions. For example, an outside handle for opening the emergency exits; drip trays for all hydraulic and other joints situated above sound-proofing material; extension of the de-icing system; provision of an anti-icing shroud on servo controls; an extra oxygen point for the crew; covers for all oxygen points; and a number of other small covers, shields and guards. A disproportionately large number of modifications are concerned with the cabin-heating system, and the heater is an item which has even now to be finalized.

### New Mark for B.O.A.C.

For B.O.A.C. a newly introduced mark of the Tudor type 688, the IVB, is now being prepared. This is a conversion of the Tudor I, and though similar to the B.S.A.A. Mk IVs, the main characteristics of which are well known, there are a number of important differences. The conversion itself entails 13 major modifications to the Mk I, the chief of which is the extension by 6ft of the flight-deck section. This entails the addition of new stringers, formers and skinning, and an extension of the present flooring and controls. The existing B.O.A.C. Tudor I crew and deck plan remains, and a flight engineer will be carried in addition to the second pilot. There will be a forward freight compartment with a large outside door, as in the Tudor IV, and the light-luggage hold will be converted into a diplomatic mail locker with double doors and a Yale lock. The cockpit remains unaltered except for being brought up to the full modification standard.

Seating layout will be similar to that of the Tudor IV, and the arrangement of windows will therefore have to be changed to the 2ft spacing plan; one new escape hatch will be introduced over the centre section, and two new

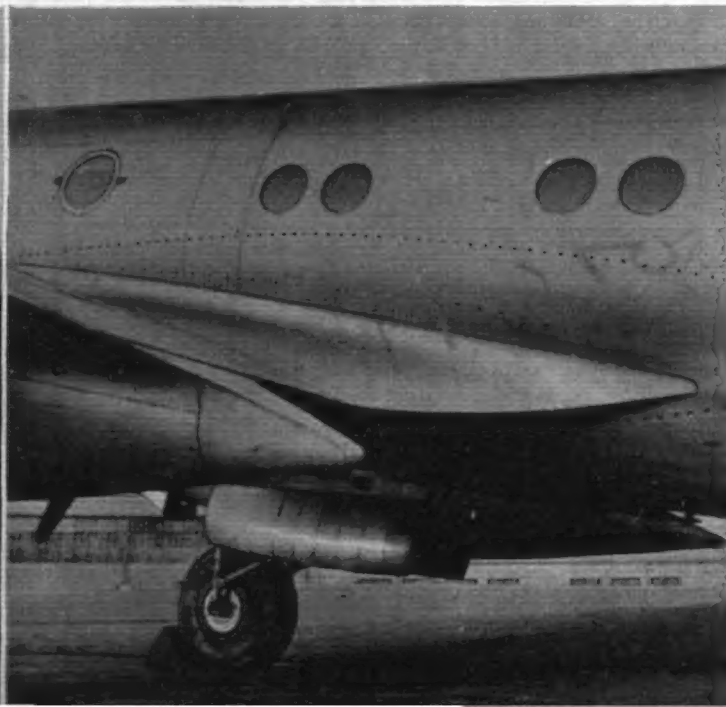


(Top) Noise level in Tudor cabins has been greatly reduced by the fitting of short exhaust pipes on the inboard side of the Merlins. Improvements have also been made to the panel which the fitter is seen attaching. (Below) Testing flow of de-icing fluid from the new, aerodynamically improved leading edge of a Tudor IV.

windows added forward. There will be three toilets, and service tables at the entrance door as fitted on the latest IVs. A third J-type dinghy (two are already carried in the wings) will be housed in the cloakroom. Except for modified stowage to suit B.O.A.C. crockery, and the increased number of passengers, the galley will be similar to that on the IV.

Upholstery is to be ripped out and interior decoration and trimming will be made to conform in colour with the standard B.O.A.C. scheme, i.e., upper wall, buff vynide; lower wall, brown vynide; carpet, mottle blue; seats, blue wool rep. Increased-capacity cabin blowers will be fitted, but in the main the pressurization system will be like that on the B.S.A.A. Mk IV. Westland-designed valves and other equipment for the pressure system have proved satisfactory and have remained unaltered from the start. A new Janitrol spray-type heater will be fitted. All radio equipment will have to be replaced to suit the new routes.

Fully modified Merlin 621 power plants, complete with exhaust manifolds and tail pipes on the inboard side, are specified, and de Havilland's



Latest aerodynamic modifications to the Tudors are (left) the new leading-edge wing root fillet and (right) the smaller and more shapely trailing-edge root fairing. The rivet holes for the attachment of the earlier large fairing have been accentuated to indicate its relative size.